U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF RESPONSE AND RESTORATION
ASSESSMENT AND RESTORATION DIVISION
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MEMORANDUM

DATE: 17 September 2019

TO: Diane Salkie, Remedial Project Manager
EPA Region 2

FROM: Todd Goeks (6-7527)
Physical Scientist, NE/GL Region

SUBJECT: Lower Passaic River

Draft Upper 9-Mile Source Control Interim Remedy Feasibility Study, Lower Passaic River Study Area Remedial Investigation/Feasibility Study, Prepared by Integral Consulting for Lower Passaic River Cooperating Parties Group. August 12, 2019

NOAA has reviewed the subject document in support of EPA's response actions at the Lower Passaic River Study Area. NOAA's review focused on protection of the aquatic environment with respect an adequate characterization of site-related hazardous substances, contaminant fate and transport, and the risks posed by contaminants.

General Comments:
As a general rule and to make the document stronger and clear, the authors should consider using active tense throughout the document. Tenses are mixed. For example, on page xiv of the Executive Summary, it is noted that "[a] selected source control IR would be supported by an Adaptive Management Plan that describes how the upper 9 miles of the LPRSA would be managed, starting during the remedial design, through the implementation of the IR and how the monitoring data would support a Final Record of Decision (ROD)." It is not clear for the reader at this point in the document whether and adaptive management plan has been developed or whether it would be developed and would describe management of the project. As the plan is included in Appendix D and is discussed in Section 1, tenses should reflect that the plan has been drafted and will support the selected IR.

Section-Specific Comments:
1. Executive Summary, page xiv, second paragraph, Adaptive Management Plan: The goal of the Plan should be clearly stated in this Section. The requirements/expectations of the Plan are touched on in the next Section; however, it would be better to place this information at the point where the Plan is first referenced and to provide greater clarity and specificity to the upper 9 miles. This Section should include a summarization of the adaptive management approach discussed in Section 9.

2. Executive Summary, Rationale For A Source Control Interim Remedy, page xiv, second paragraph: This Section should be revised to expand the discussion of expected contaminant reduction resulting from IR implementation to include all COCs, including those listed in the Key Findings From The Remedial Investigation section. Projected contaminant concentrations should be included rather than presenting only percent reductions. The stated significant ecological risk reduction should be defined and described, including projected exposure (sediment, water, tissue) reductions relative to exposure guidelines and the approved ERA.

3. Executive Summary, RAO 1—Addressing Surficial Sediment Source Areas, page xvii: This Section should be revised to provide the reader with the underlying rationale for proposing a post-IR SWAC target for TCDD that is an order of magnitude higher than the remediation goal for the reach downstream of the proposed IR. At a minimum, the revised FS should include alternatives that meet RAOs that are consistent with those set for OU2, the Lower 8.3 miles. The potential for recontamination of the lower reach should be also presented.

4. Executive Summary, RAO 2—Addressing Subsurface Sediment Source Areas, page xviii: This Section should be revised to include a listing of the subsurface RAL concentration levels for TCDD and PCBs.

5. Executive Summary, The Remedial Alternatives, page xviii: This Section should be revised to include the rationale for listing RALs for only TCDD and PCBs.

5. Executive Summary, The Remedial Alternatives, page xviii, second paragraph: The information presented in this paragraph needs clarification. The implication of the first sentence is that the document is incorrectly titled. This Section should be revised to clarify whether the intended meaning is that *assumptions* for "previously conducted or currently planned LPRSA remedial actions" have been incorporated in deriving and evaluating the alternatives.

6. Executive Summary, Evaluation Of The Alternatives, Threshold Criteria, page xix; Section 7, Development Of Remedial Alternatives, fourth paragraph, page 7-1: Alternative 5 is noted in these Sections as not meeting the threshold criteria; however, it is noted that the alternative is retained for comparison purposes. There is no merit in retaining Alternative 5, which should have been dropped at the alternatives screening stage due to failing to achieve the threshold criteria. Further, the Draft FS presents one alternative with three variations. Alternatives 2, 3, and 4 are effectively one alternative as they present the same combination of technology types and process options; the differences are limited to footprints and volume of material addressed due to the respective remedial SWAC targets.

7. Section 5.1, Evaluation And Screening Of Remedial Technologies And Process Options: This Section lists several technology types and process options as being "retained for further evaluation during remedial design." The purpose of the FS however is to evaluate the available technology types and process options to develop a list of potential remedial components, to develop alternative remedies from combinations of those components, and to conduct a detailed evaluation of the derived alternative remedies considering the threshold and balancing criteria. Therefore, if there is potential for technology types and/or process options to be useful in addressing the hazardous substance releases associated with the site, those technology types and process options that have been noted as being retained for further evaluation in the remedial design should be developed into alternatives and evaluated in the revised FS.

8. Section 7, Development Of Remedial Alternatives: This Section should be expanded in the revised FS to provide the information necessary to more fully develop all components of the proposed alternatives such that the alternatives can be properly evaluated against the criteria; for example, deferring proposal of specific methods and equipment until the remedial design does not allow for a representative

or complete detailed evaluation of alternatives in Section 8.3 nor a representative comparative analysis in Section 8.4 in regards to either effectiveness or implementability.

9. Section 7.1.2, Dredged Material Management, page 7-3: The capacity and accessibility of potential commercial sediment processing facilities should be evaluated in this Section of the revised FS. The information is necessary to evaluate the potential facilities such that the list of facilities that meet IR accessibility and volume requirements can be presented to the public at the proposed plan stage.

10. Section 7.1.3, Mitigation of Dredging Residuals, page 7-3: This section should be revised to provide the rationale used to derive the proposed 10% of the dredge footprint area for determining the extent of the proposed residuals management cover. The revisions should include specifying the sand cover thickness, e.g., 6 inches, and whether the 10% areal extent is proposed to be placed equally in a buffer around the dredge polygon or whether the downstream/upstream areas would receive a wider cover placement. Supporting rationale should be included.

11. Section 7.2.1, Remedial Alternative Footprints, Figures 7-2, 7-3, 7-4; and Appendix B, Development of Remedial Alternatives Footprints, Section 5 Resulting Footprints, and Figures 5-1, 5-2, 5-3: The respective Sections of the draft report and Appendix B describe the derivation of the remedial footprints based on decision units depicted on the respective figures. It is difficult for the reader to accurately discern the difference between Alternatives 2, 3, and 4 given the current figures. Therefore, the respective Sections should each be revised to provide an additional figure that depicts a comparison of the decision units presented in the current figures. For example, Figures 5-1, 5-2, 5-3 in Appendix B depict decision units for Alternatives 2, 3, and 4 respectively, using a different color for each series of figures. By overlaying the respective decision units for the alternatives in reverse order, the reader will be presented with a figure that clearly depicts the differences in the footprints for the alternatives being evaluated.

12. Section 8.4 Comparative Analysis Of The Alternatives; Table 8-7: The comparison of alternatives provided in Table 8-7 appears to provide a biased summary that is not supported by the information presented in Section 8.3, Detailed Evaluation Of The Alternatives. For example, Table 8-7 provides a relative ranking for Worker Risk and Community Impact, yet the descriptions of both worker risk and community impact is exactly the same for each of the active alternatives in Section 8.3. In effect, the document provides no basis for ranking the alternatives significantly differently with respect to these criteria. The only differences between the alternatives as described in Section 8.3 are those listed in the Key Metrics Summary at the top of Table 8-7. Other than the numerical changes, the text in Section 8.3 is essentially identical for each of the active alternatives.

NOAA appreciates the opportunity to provide input on the Lower Passaic River Study Area site and looks forward to maintaining the cooperative relationship with EPA toward our mutual goal of protecting and restoring the Nation's natural resources. Please feel free to contact me at 312.886.7527 if you would like to discuss these comments or if I can provide any clarification or additional information.

cc: Reyhan Mehran, NOAA R2 RRC
Eli Reinharz, NOAA NE RRC